

CLAIMS

1. Agricultural machine comprising a body (4) resting at least partially on the ground, said body (4) is intended to be hitched to a tractor vehicle (3) by means of at least one articulation defining:
- a first pivoting axis (17) directed upward,
 - a second substantially horizontal pivoting axis (18) directed in a direction of travel (2) of said agricultural machine (1), and
 - a third substantially horizontal pivoting axis (42) directed transversely to said direction of travel (2),
- characterized in** that it also comprises:
- an adapter (25) intended to be rigidly connected to a drawbar (24) of said tractor vehicle (3),
 - a support spindle (34), and
 - at least one jaw (37) comprising an opening (38) widening out in a substantially vertical direction,
- such that, during hitching, said support spindle (34) is intended to engage in said jaw (37).
2. Agricultural machine as claimed in claim 1, **characterized in** that it also comprises a primary hitch bar (10) connected to said body (4) and a secondary hitch bar (12) connected to said primary hitch bar (10).
3. Agricultural machine as claimed in claim 2, **characterized in** that said secondary hitch bar (12) is connected in pivoting manner to said primary hitch bar (10) by means of an articulation defining said first axis (17) directed upward.
4. Agricultural machine as claimed in claim 2 or 3, **characterized in** that said secondary hitch bar

(12) is connected in pivoting manner to said primary hitch bar (10) by means of an articulation defining said second substantially horizontal axis (18) directed in a direction of travel (2).

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5. Agricultural machine as claimed in claim 2, **characterized in** that it also comprises a connection and transmission device (11) intended to connect said secondary hitch bar (12) to said primary hitch bar (10) and by means of which working units (5) of said body (4) are driven from a power take-off (19) of said tractor vehicle (3).

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6. Agricultural machine as claimed in claim 5, **characterized in** that said connection and transmission device (11) comprises:

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- a first gearbox (15) rigidly connected to a front portion of said primary hitch bar (10), and

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- a second gearbox (16) connected in pivoting manner to said first gearbox (15) by means of an articulation defining said first axis (17) directed upward,

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said secondary hitch bar (12) being connected in pivoting manner to said second gearbox (16) by means of an articulation defining said second substantially horizontal axis (18) directed in a direction of travel (2).

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7. Agricultural machine as claimed in any one of claims 2 to 6, **characterized in** that:

- said support spindle (34) is rigidly connected to said adapter (25),
- said at least one jaw (37) is rigidly connected to said secondary hitch bar (12), and
- said opening (38) widens out downward.

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8. Agricultural machine as claimed in claim 7, **characterized in** that said at least one jaw (37)

is connected in a manner adjustable in height relative to said secondary hitch bar (12).

- 5 9. Agricultural machine as claimed in claim 7 or 8, **characterized in** that it comprises two jaws (37) arranged symmetrically on either side of a vertical mid-plane of said secondary hitch bar (12).
- 10 10. Agricultural machine as claimed in any one of claims 7 to 9, **characterized in** that said support spindle (34) comprises a cylinder (36) and at least one centering element (35) centered on said cylinder (36), said centering element (35) having
15 a frustoconical shape whose vertex is oriented toward one end of said cylinder (36).
11. Agricultural machine as claimed in claim 10 taken in combination with claim 9, **characterized in** that
20 said support spindle (34) comprises two centering elements (35), the distance (44) separating the outer faces of said centering elements (35) being substantially equal to the distance separating said jaws (37).
- 25 12. Agricultural machine as claimed in claim 11, **characterized in** that said adapter (25) comprises an intermediate bar (26) and said centering elements (35) are placed beside on either side of
30 said intermediate bar (26).
13. Agricultural machine as claimed in any one of claims 1 to 12, **characterized in** that, during hitching, said support spindle (34) and said jaw
35 (37) constitute an articulation pivoting along said third substantially horizontal axis (42) directed transversely to said direction of travel (2).

14. Agricultural machine as claimed in any one of claims 1 to 13, **characterized in** that said agricultural machine (1) is a mower.